Please insert the following subtitle before the first paragraph on the fifth page of the specification:

A 2 -- SUMMARY OF THE INVENTION- -.

Please insert the following subtitle before the second paragraph on the fifth page of the specification:

--DETAILED DESCRIPTION OF THE INVENTION--.

Please insert the following Abstract on a clean sheet after the claims:

## - - ABSTRACT

The invention relates to a method for producing a coating for absorption of neutrons produced in nuclear reactions of radioactive material which can be applied in an economically feasible and simple manner, increases the effectivity of absorption, enables greater variability of base material used and variability of shape of said shielding elements and in particular the production of lighter shielding elements with at least the same absorption quality. The invention also relates to a method for producing a coating for absorption of neutrons produced in nuclear reactions of radioactive materials. At least one part of a shielding element consisting of base material is provided at its surface designed therefore with a layer made of an element with a high neutron capture section and a metallic element in a dispersion bath. Said metallic element can be deposited by electrolytic or autocatalytic means. During the coating process, a relative movement between a surface to be coated and a dispersion bath is effected at least temporarily, whereby the element with a larger neutron capture section is present in an electrically conducting compound in said dispersion bath.--